



#3

<b>PTO/SB/08A</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)  		<b>Complete if Known</b>		
		Application Number	10/073,506	
		Filing Date	February 11, 2002	
		Confirmation Number	6190	
		First Named Inventor	Robert J. Falster	
		Group Art Unit	1775	
		Examiner Name		
Sheet	of	10	Attorney Docket No.	MEMC 98-1451/2554.1

**RECEIVED**  
MAY 31 2002  
TC 1700

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
		Number	Kind Code <sup>2</sup> (if known)		
	1	4,314,585		Yamamoto et al.	02/1982
	2	4,376,657		Nagasawa et al.	03/1983
	3	4,437,922		Bischoff et al.	03/1984
	4	4,505,759		O'Mara	03/1985
	5	4,548,664		Tobin	10/1985
	6	4,851,358		Huber	07/1989
	7	4,868,133		Huber	09/1989
	8	4,981,549		Yamashita et al.	01/1991
	9	5,264,189		Yamashita et al.	11/1993
	10	5,327,007		Imura et al.	07/1994
	11	5,401,869		Falster et al.	03/1995
	12	5,403,406		Falster et al.	04/1995
	13	5,445,975		Gardner et al.	08/1995
	14	5,474,020		Bell et al.	12/1995
	15	5,485,803		Habu	01/1996

Examiner Signature		Date Considered	11/20/02
-----------------------	---	--------------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

#3

PTO/SB/08A <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/073,506
				Filing Date	February 11, 2002
				Confirmation Number	6190
				First Named Inventor	Robert J. Falster
				Group Art Unit	1775
				Examiner Name	
Sheet	2	of	10	Attorney Docket No.	MEMC 98-1451/2554.1

<del>16</del>	<del>5,487,354</del>	<del>von Ammon et al.</del>	<del>01/1996</del>
<del>17</del>	<del>5,502,010</del>	<del>Nadahara et al.</del>	<del>03/1996</del>
<del>18</del>	<del>5,502,331</del>	<del>Inoue et al.</del>	<del>03/1996</del>
<del>19</del>	<del>5,534,294</del>	<del>Kubota et al.</del>	<del>07/1996</del>
<del>20</del>	<del>5,539,245</del>	<del>Imura et al.</del>	<del>07/1996</del>
<del>21</del>	<del>5,593,494</del>	<del>Falster</del>	<del>01/1997</del>
<del>22</del>	<del>5,611,855</del>	<del>Wijaranakula</del>	<del>03/1997</del>
<del>23</del>	<del>5,667,584</del>	<del>Takano et al.</del>	<del>09/1997</del>
<del>24</del>	<del>5,674,766</del>	<del>Sato et al.</del>	<del>10/1997</del>
<del>25</del>	<del>5,704,973</del>	<del>Sakurada et al.</del>	<del>01/1998</del>
<del>26</del>	<del>5,728,211</del>	<del>Takano et al.</del>	<del>03/1998</del>
<del>27</del>	<del>5,738,942</del>	<del>Kubota et al.</del>	<del>04/1998</del>
<del>28</del>	<del>5,788,763</del>	<del>Hayashi et al.</del>	<del>08/1998</del>
<del>29</del>	<del>5,919,302</del>	<del>Falster et al.</del>	<del>07/06/1999</del>
<del>30</del>	<del>5,935,320</del>	<del>Graef et al.</del>	<del>08/10/1999</del>
<del>31</del>	<del>5,939,770</del>	<del>Kageyama</del>	<del>08/1999</del>
<del>32</del>	<del>5,942,032</del>	<del>Kim et al.</del>	<del>08/24/1999</del>
<del>33</del>	<del>5,944,889</del>	<del>Park et al.</del>	<del>08/1999</del>
<del>34</del>	<del>5,954,873</del>	<del>Hourai et al.</del>	<del>09/1999</del>
<del>35</del>	<del>5,968,262</del>	<del>Saishouji et al.</del>	<del>10/1999</del>

Examiner Signature	<i>Matthew Anderson</i>	Date Considered	11/20/02
--------------------	-------------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

#3

PTO/SB/08A <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/073,506
				Filing Date	February 11, 2002
				Confirmation Number	6190
				First Named Inventor	Robert J. Falster
				Group Art Unit	1775
Examiner Name					
Sheet	3	of	10	Attorney Docket No.	MEMC 98-1451/2554.1

<del>36</del>	<del>5,968,264</del>		<del>Lida et al.</del>	<del>10/1999</del>
<del>37</del>	<del>6,045,610</del>		<del>Park et al.</del>	<del>04/2000</del>
<del>38</del>	<del>6,053,974</del>		<del>Luter et al.</del>	<del>04/25/2000</del>
<del>39</del>	<del>6,093,913</del>		<del>Schrenker et al.</del>	<del>07/25/2000</del>
<del>40</del>	<del>6,153,008</del>		<del>von Ammon et al.</del>	<del>11/28/2000</del>
MAA 41	6,190,631	B1	Falster	02/20/2001
<del>42</del>	<del>6,228,164</del>		<del>von Ammon et al.</del>	<del>05/08/2001</del>
MAA 43	6,254,672	B1	Falster et al.	07/03/2001
MAA 44	6,287,380	B1	Falster et al.	09/11/2001

### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	T <sup>6</sup>
		Office	Number <sup>4</sup>	Kind Code <sup>2</sup> (if known)			
	<del>45</del>	<del>EP</del>	<del>0 504 837</del>	<del>A2</del>		<del>09/1992</del>	
	<del>46</del>	<del>EP</del>	<del>0 503 816</del>	<del>B1</del>		<del>09/1992</del>	
	<del>47</del>	<del>EP</del>	<del>0 536 958</del>	<del>A1</del>		<del>04/1993</del>	
	<del>48</del>	<del>EP</del>	<del>0 716 188</del>	<del>A1</del>		<del>06/1996</del>	
	<del>49</del>	<del>EP</del>	<del>0 747 513</del>	<del>A2</del>	<del>Shin-Etsu Handotai Company Ltd.</del>	<del>12/11/1996</del>	
	<del>50</del>	<del>EP</del>	<del>0 799 913</del>	<del>A1</del>		<del>10/1997</del>	

Examiner Signature	<i>Matthew Anderson</i>	Date Considered	11/20/02
--------------------	-------------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

#3 RECEIVED  
MAY 21 2002

O I P E  
MAY 16 2002  
PATENT AND TRADEMARK OFFICE

PTO/SB/08A  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/073,506
				Filing Date	February 11, 2002
				Confirmation Number	6190
				First Named Inventor	Robert J. Falster
				Group Art Unit	1775
				Examiner Name	
Sheet	4	of	10	Attorney Docket No.	MEMC 98-1451/2554.1

<del>51</del>	EP	<del>0 890 662</del>		<del>Shinetsu Handotai KK</del>	<del>01/13/1999</del>
<del>52</del>	EP	<del>0 909 840</del>		<del>Shinetsu Handotai KK</del>	<del>04/21/1999</del>
<del>53</del>	EP	<del>0 962 557</del>	A1	<del>Shin-Etsu Handotai Company Ltd.</del>	<del>05/21/1999</del>
<del>54</del>	EP	<del>0 962 550</del>	A1		<del>08/1999</del>
<del>55</del>	DE	<del>39 05 626</del>	A1		<del>08/1989</del>
<del>56</del>	DE	<del>43 23 964</del>	A1		<del>01/1994</del>
<del>57</del>	DE	<del>44 14 947</del>	A1		<del>08/1995</del>
<del>58</del>	DE	<del>198 06 045</del>	A1		<del>08/1998</del>
<del>59</del>	JP	<del>2-180789</del>			<del>07/1990</del>
<del>60</del>	JP	<del>Hei 3-93700</del>		<del>Nippon Steel Corp.</del>	<del>04/18/1991</del>
<del>61</del>	JP	<del>4-108862</del>			<del>04/1992</del>
MAA	62	JP	Hei 7-041383	Nippon Steel Corp.et al.	02/10/1995
MAA	63	JP	Hei 7-206591	Nippon Steel Corp.et al.	08/08/1995
	64	JP	7321120 (Abstract Only)		12/1995
	65	JP	7335657 (Abstract Only)		12/1995
	66	JP	8045947 (Abstract Only)		02/1996
	67	JP	8045944 (Abstract Only)		02/1996
	68	JP	8-045945		02/1996

Examiner Signature	<i>Matthew Anderson</i>	Date Considered	11/20/02
--------------------	-------------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

#3 RECEIVED  
MAY 21 2002  
TC 1700

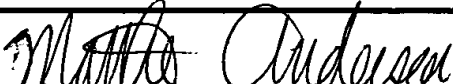
PTO/SB/08A

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

				Complete if Known	
				Application Number	10/073,506
				Filing Date	February 11, 2002
				Confirmation Number	6190
				First Named Inventor	Robert J. Falster
				Group Art Unit	1775
				Examiner Name	
Sheet	5	of	10	Attorney Docket No.	MEMC 98-1451/2554.1

<del>MA</del>	69	JP	Hei 8-208374		Nippon Steel Corp. et al	08/13/1996	
	<del>70</del>	<del>JP</del>	<del>HO 8-268794</del>		<del>Sumitomo Sitix Corp.</del>	<del>10/15/1996</del>	
	<del>71</del>	<del>JP</del>	<del>8-330316 (Pub. Hei 07-158458)</del>		<del>Sumitomo Sitix Corp.</del>	<del>12/1996</del>	
	<del>72</del>	<del>JP</del>	<del>9-199416</del>			<del>07/1997</del>	
	<del>73</del>	<del>JP</del>	<del>9-202690</del>			<del>08/1997</del>	
	<del>74</del>	<del>JP</del>	<del>11-150119</del>	<del>A</del>		<del>06/1999</del>	
	<del>75</del>	<del>JP</del>	<del>11-157995</del>	<del>A</del>		<del>06/1999</del>	
	<del>76</del>	<del>JP</del>	<del>11-180800</del>	<del>A</del>		<del>07/1999</del>	
	<del>77</del>	<del>JP</del>	<del>11-189495</del>	<del>A</del>		<del>07/1999</del>	
	<del>78</del>	<del>JP</del>	<del>11-199380</del>	<del>A</del>		<del>07/1999</del>	
	<del>79</del>	<del>JP</del>	<del>11-199387</del>	<del>A</del>		<del>07/1999</del>	
	<del>80</del>	<del>WO</del>	<del>97/20393</del>			<del>07/1997</del>	
	<del>81</del>	<del>WO</del>	<del>98/45507</del>			<del>10/1998</del>	
	<del>82</del>	<del>WO</del>	<del>98/45508</del>			<del>10/1998</del>	
	<del>83</del>	<del>WO</del>	<del>98/45509</del>			<del>10/1998</del>	
	<del>84</del>	<del>WO</del>	<del>98/45510</del>			<del>10/1998</del>	
	<del>85</del>	<del>GB</del>	<del>2 137 524</del>	<del>A</del>	<del>Hitachi Ltd. (Japan)</del>	<del>10/10/1984</del>	
	<del>86</del>	<del>GB</del>	<del>2182 262 A</del>			<del>05/1987</del>	
<b>OTHER ART - NON PATENT LITERATURE DOCUMENTS</b>							

Examiner Signature		Date Considered	11/20/02
--------------------	---	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

PTO/SB/08A MAY 16 2002 <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/073,506
				Filing Date	February 11, 2002
				Confirmation Number	6190
				First Named Inventor	Robert J. Falster
				Group Art Unit	1775
				Examiner Name	
Sheet	6	of	10	Attorney Docket No.	MEMC 98-1451/2554.1

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>6</sup>
	87	ABE, et al., "Defect-Free Surfaces of Bulk Wafers by Combination of RTA and Crystal Growth", (publication information unknown).	
	88	ABE, et al., "Innovated Silicon Crystal Growth and Wafering Technologies", Electrochemical Society Proceedings, Volume 97, No. 3, pp. 123-133.	
	89	ABE, T., et al., "Behavior of Point Defects in FZ Silicon Crystals", Semiconductor Silicon 1990, Proceedings of the Sixth International Symposium on Silicon Materials Science and Technology, Vol. 90-7 (1990), pp. 105-116	
	90	DE KOCK, A.J.R., "The Elimination of Vacancy Cluster Formation in Dislocation-Free Silicon Crystals", J. of the Electrochem. Soc.: SOLID-STATE SCIENCE AND TECHNOLOGY, Vol. 118, No. 11, (Nov. 1971), pp. 1851-1856	
	91	DE KOCK, A.J.R., et al., "Effect of Growth Parameters on Formation and Elimination of Vacancy Clusters in Dislocation-Free Silicon Crystals", Journal of Crystal Growth, Vol. 22 (1974), pp. 311-320	
MAA	92	DE KOCK, A.J.R., "Point Defect Condensation in Dislocation-Free Silicon Crystals", Semiconductor Silicon, 1977, pp. 508-520.	
	93	DE KOCK, et al., "The Effect of Doping on the Formation of Swirl Defects in Dislocation-Free Czochralski-Grown Silicon crystals", Journal of Crystal Growth, Vol. 49, pp. 718-734 (1980).	
	94	DORNBERGER et al., "The Dependence of Ring Like Distributed Stacking Faults on the Axial Temperature Gradient of Growing Czochralski Silicon Crystals", Electrochemical Society Proceedings, Volume 95-4, pp. 294-305 (1995).	
	95	DORNBERGER, E., et al., "Simulation of Growth-In Voids in Czochralski Silicon Crystals", Electrochemical Society Proceedings, Volume 97, No. 22, pp. 40-49	
	96	DORNBERGER, E., et al., "The Impact of Dwell Time Above 900°C During Crystal Growth on the Gate Oxide Integrity of Silicon Wafers", Electrochemical Society Proceedings, Volume 96, No. 13, pp. 140-151.	

Examiner Signature	<i>Matthew Anderson</i>	Date Considered	11/20/02
--------------------	-------------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

#3 RECEIVED  
MAY 21 2002  
TC 1700

PTO/SB/08A MAY 16 2002 <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/073,506
				Filing Date	February 11, 2002
				Confirmation Number	6190
				First Named Inventor	Robert J. Falster
				Group Art Unit	1775
				Examiner Name	
Sheet	7	of	10	Attorney Docket No.	MEMC 98-1451/2554.1

97	<del>DORNBERGER, E., et al., "Simulation of Non-Uniform Grown-In Void Distributions in Czochralski Silicon Crystals", Electrochemical Society Proceedings, Vol. 98, Vol. 1, pp. 490-503</del>	
98	<del>EIDENZON, A.M., et al., "Influence of growth rate on swirl defects in large dislocation-free crystals of silicon grown by the Czochralski method" Soviet Physics Crystallography, Vol. 30(5), (1985), pp. 576-580</del>	
99	<del>EIDENZON, A.M., et al., "Defect-Free Silicon Crystals Grown by the Czochralski Technique" Inorganic Materials, Vol. 33-3 (1997) pp. 219-225</del>	
100	<del>FOLL, H., et al., "The Formation of Swirl Defects in Silicon by Agglomeration of Self-Interstitials", Journal of Crystal Growth, 1977, pp. 90-1087, Vol. 40, North-Holland Publishing Company</del>	
101	<del>Hara, et al., "Enhancement of Oxygen Precipitation in Quenched Czochralski Silicon Crystals", J. Appl. Phys., Vol. 66, No. 8, pp. 3958-3960 (1989).</del>	
102	<del>HOURAI, M., et al., "Improvement of Gate Oxide Integrity Characteristics of CZ-Grown Silicon Crystals", Progress In Semiconductor Fabrication presented by: Semiconductor Equipment and Materials International, Semicon/Europa 93, March 30-April 1, 1993, Geneva, Switzerland</del>	
103	<del>HOURAI, M., et al., "Growth Parameters Determining the Type of Grown-In Defects in Czochralski Silicon Crystals", Materials Science Forum, Vols. 196-201 (1995) pp. 1713-1718</del>	
104	<del>International Search Report for Application No. PCT/US 99/24068 dated October 13, 1999, 7 pages.</del>	
105	<del>IZUNOME K., et al., "Light Point Defects on Hydrogen Annealed Silicon Wafer, Jpn. J. Appl. Phys. Vol. 36, pp. L1127-L1129, 1997</del>	
106	<del>JACOB, et al., "Determination of Vacancy Concentrations in the Bulk of Silicon Wafers by Platinum Diffusion Experiments", J. Appl. Phys., Vol. 82, No. 1, pp. 182-191 (1997).</del>	
107	<del>KISSINGER, et al., "A Method for Studying the Grown-In Defect Density Spectra in Czochralski Silicon Wafers", J. Electrochem. Soc., Vol. 144, No. 4, pp. 1447-1456 (1997).</del>	
108	<del>LEMKE, H., et al., "Analytical Approximations for the Distributions of Intrinsic Point Defects in Grown Silicon Crystals", Phys. Stat. Sol. (a) Vol. 176 (1999), pp. 843-865</del>	

Examiner Signature	<i>Matthew Anderson</i>	Date Considered	11/20/02
--------------------	-------------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

#3 RECEIVED  
MAY 21 2002

O.I.P.E. J0331  
MAY 16 2002

PTO/SB/08A  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	09/416,998
				Filing Date	October 13, 1998
				Confirmation Number	6867
				First Named Inventor	Robert J. Falster et al.
				Group Art Unit	1765
				Examiner Name	
Sheet	8	of	10	Attorney Docket No.	MEMC 98-1451 (2554.1)

<del>109</del>	<del>MIYAZAKI M., et al., "Microstructure Observation of 'Crystal-Originated Particles' on Silicon Wafers", Jpn. J. Appl. Phys., Vol. 34, pp. 6303-6307, 1995</del>	
<del>110</del>	<del>NAKAMURA, Kezo, et al., "Formation Process of Grown-In Defects in Czochralski Grown Silicon Crystals", Journal of Crystal Growth, Vol. 180, pp. 61-72, 1997.</del>	
MAA 111	PARK, J.G., et al., "Nature of D-Defect in CZ Silicon: D-Defect Dissolution and D-Defect Related T.D.D.B.", Material Science Forum, Vol.s. 196-201, 1995, pp. 1697-1706.	/
<del>112</del>	<del>PARK, J.G., et al., "Effect of Crystal Defects on Device Characteristics", <i>Proceedings of the Symposium on Crystalline Defects and Contamination: Their Impact And Control in Device Manufacturing II</i>, Proceed. Vol. 97-22 (1997), pp.173-195</del>	
<del>113</del>	<del>PUZANOV, N.I., et al., "Influence of Transitional Crystallization Regimes on Microdefects in Silicon", USSR Academy of Sciences Newsletter, Vol. 22, No. 8 (1986), pp.1237-1242</del>	X
<del>114</del>	<del>PUZANOV, N.I., et al., "Relaxation in A System Of Point Defects in A Growing Dislocation-Free Crystal Of Silicon", Sov. Phys. Crystallogr., Vol. 31, No. 2, (1986) pp. 219-222.</del>	
<del>115</del>	<del>PUZANOV, N.I., et al., "The effect of thermal history during crystal growth on oxygen precipitation in Czochralski-grown silicon", Semicond. Sci. Technol., Vol. 7, (1992), pp. 406-413</del>	
<del>116</del>	<del>PUZANOV, N., et al., "Formation of the bands of anomalous oxygen-precipitation in Czochralski-grown Si crystals" Journal of Crystal Growth vol. 137, (1994), pp. 642-652</del>	
<del>117</del>	<del>PUZANOV, N., et al., "The Role of Intrinsic Point Defects in the Formation of Oxygen Precipitation Centers in Dislocation-Free Silicon" Crystallography Reports, Vol. 41, No. 1, (1996), pp. 134-141</del>	
<del>118</del>	<del>PUZANOV, N.I., et al., "Cultivation, Morphology and Structural Integrity of Dislocation-Free Silicon Tetracrystals", Inorganic Materials, Vol. 32, No. 8 (1996), pp. 903-912</del>	X
<del>119</del>	<del>PUZANOV, N.L., et al., "Harmful Microdefects in the Seed-End Portion of Large-Diameter Silicon Ingots", Inorganic Materials, Vol. 33, No. 8, (1997) pp. 765-769</del>	
<del>120</del>	<del>PUZANOV, N., et al., "Modelling microdefect distribution in dislocation-free Si crystals grown from the melt", Journal of Crystal Growth, 178, (1997), pp. 468-478</del>	

Examiner Signature	<i>Matthew Andressa</i>	Date Considered	11/20/02
--------------------	-------------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.



#3 RECEIVED  
MAY 21 2002  
TC 1700

PTO/SB/08A MAY 16 2002 <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	09/416,998
				Filing Date	October 13, 1999
				Confirmation Number	6867
				First Named Inventor	Robert J. Falster et al.
				Group Art Unit	1765
				Examiner Name	
Sheet	9	of	10	Attorney Docket No.	MEMC 98-1451 (2554.1)

<del>121</del>	<del>PUZANOV, N., et al., "Role of Vacancies in the Nucleation of Ringlike-patterned Oxidation-Induced Stacking Faults in Melt-grown Silicon Crystals" Inorganic Materials, Vol. 34-4, (1998) pp. 307-314</del>	
<del>122</del>	<del>ROKSNOER, P. J., "Microdefects in a Non-Striated Distribution in Floating-Zone Silicon Crystals", Journal of Crystal Growth, Vol. 53 (1981), pp. 563-573</del>	
<del>123</del>	<del>ROKSNOER, P. J., "The Mechanism of Formation of Microdefects in Silicon". Journal of Crystal Growth, Vol. 68 (1984), pp. 596-612</del>	
<del>124</del>	<del>SHIMANUKI, Y., et al., "Effects of Thermal History on Microdefect Formation in Czochralski Silicon Crystals", Japanese Journal of Applied Physics, Vol. 24, No. 12, (1985), pp. 1594-1599</del>	
<del>125</del>	<del>SINNO, T., et al., "On the Dynamics of the Oxidation-Induced Stacking-Fault Ring in as-grown Czochralski silicon crystals", Applied Physics Letters, Vol. 70, No. 17, pp. 2250-2252, 1997.</del>	
<del>126</del>	<del>SINNO, T., et al., "Point Defect Dynamics and the Oxidation-Induced Stacking-Fault Ring in Czochralski-Grown Silicon Crystals", J. Electrochem. Soc., Vol. 145, No. 1, pp. 302-318, 1998.</del>	
MA 127	TAKANO, K., et al., "Relationship Between Grown-in Defects and Thermal History During CZ Si Crystal Growth", Materials Science Forum, Vols. 196-201, 1995, pp. 1707-1712.	4
<del>128</del>	<del>TAN, T. Y., "Point Defects, Diffusion Processes, and Swirl Defect Formation in Silicon", Appl. Phys. A., Vol. 37, pp. 1-17, 1985.</del>	
<del>129</del>	<del>VANHELLEMONT, J., et al., "Defects in As-Grown Silicon and Their Evolution During Heat Treatments", Materials Science Forum, Vols. 258-263, pp. 341-346, 1997.</del>	
<del>130</del>	<del>von AMMON et al., "The Dependence of Bulk Defects on the Axial Temperature Gradient of Silicon Crystals During Czochralski Growth", Journal of Crystal Growth, Vol. 151, pp. 273-277 (1995).</del>	
<del>131</del>	<del>von AMMON et al. "Bulk properties of very large diameter silicon single crystals" Journal of Crystal Growth, Vol. 198/199, (1999), pp. 390-398</del>	
<del>132</del>	<del>VORONKOV, V., et al., "Behaviour and Effects of Intrinsic Point Defects in the Growth of Large Silicon Crystals", Electrochemical Society Proceedings, Volume 97-22, pp. 3-17 (1997).</del>	
<del>133</del>	<del>VORONKOV, "The Mechanism of Swirl Defects Formation in Silicon," Journal of Crystal Growth, Vol. 59, pp. 625-643 (1982).</del>	

Examiner Signature	<i>Matthew Andressa</i>	Date Considered	4/20/02
--------------------	-------------------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.

#3

RECEIVED  
MAY 21 2002  
TC 700

PTO/SB/08A

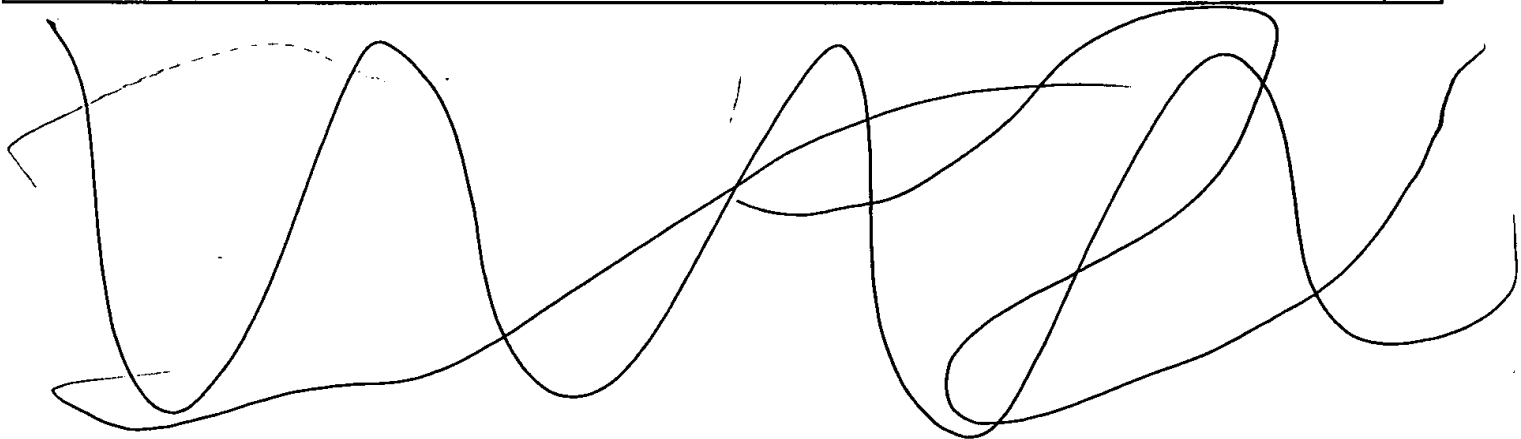
O I P E  
MAY 16 2002  
PATENT OFFICE

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

				Complete if Known	
				Application Number	09/416,998
				Filing Date	October 13, 1999
				Confirmation Number	6867
				First Named Inventor	Robert J. Falster et al.
				Group Art Unit	1765
				Examiner Name	
Sheet	10	of	10	Attorney Docket No.	MEMC 98-1451 (2554.1)

<del>134</del>	<del>WIJARANAKULA, W., "Effect of high temperature annealing on the dissolution of the D-defects in n-type Czochralski silicon", Appl. Phys. Lett., Vol. 68, No. 8, (1994), pp.1030-1032</del>	
<del>135</del>	<del>WIJARANAKULA, W., "Numerical Modeling of the Point Defect Aggregation during the Czochralski Silicon Crystal Growth", Journal of Electrochemical Society, Vol. 139, No. 2 (Feb. 1992), pp.604-616</del>	
<del>136</del>	<del>WINKLER, et al., "Improvement of the Gate Oxide Integrity by Modifying Crystal Pulling and Its Impact on Device Failures", J. Electrochem. Soc., Vol. 141, No. 5, pp. 1398-1401 (1994).</del>	
MMA 137	YAMAGISHI, et al., "Recognition of D Defects in Silicon Single Crystals by Preferential Etching and Effect on Gate Oxide Integrity", Semicond. Sci Technol. 7, 1992, A135-A140.	/
MMA 138	YAMAUCHI, et al., "Application of Copper-Decoration Method to Characterize As-Grown Czochralski-Silicon", Jpn. J. Appl. Phys., Vol. 31, 1992, pp. L439-L442.	/
<del>139</del>	<del>ZIMMERMAN, H., et al. "Gold and Platinum Diffusion: the Key to the Understanding of Intrinsic Point Defect Behavior in Silicon", Applied Physics A Solids and Surfaces, Vol. A55, No. 1 (1992) pp. 121-134</del>	
<del>140</del>	<del>ZIMMERMAN, H., et al. "Vacancy concentration wafer mapping in silicon" Journal of Crystal Growth, Vol. 129, (1993) pp. 582-592.</del>	



Examiner Signature	Matthew Anderson	Date Considered	11/20/02
--------------------	------------------	-----------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached or place an "A" here if English language abstract is attached..

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, D.C. 20231.